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=> fil reg
FILE 'REGISTRY' ENTERED AT 15:05:14 ON 27 DEC 2005

=> d his

     FILE 'HCAPLUS' ENTERED AT 13:06:24 ON 27 DEC 2005
L1             2 S US20040176267/PN
               SEL RN

     FILE 'REGISTRY' ENTERED AT 13:07:07 ON 27 DEC 2005
L2             7 S E1-E7
L3               STR
L4            50 S L3
L5               STR L3
L6             4 S L5
L7               STR L5
L8            36 S L7
L9               SCR 1838
L10           14 S L7 NOT L9
L11              SCR 2043
L12           14 S L7 NOT (L9 OR L11)
L13              STR L7
L14           10 S L13 NOT (L9 OR L11)
L15              STR L13
L16           10 S L15 NOT (L9 OR L11)
L17              SCR 1803
L18           10 S L15 AND L17 NOT (L9 OR L11)
L19              STR L15
L20            1 S L19 AND L17 NOT (L9 OR L11)
L21            1 S L19
L22           14 S L19 FUL
L23            0 S L22 AND L2
               SAV L22 DEL788/A

     FILE 'HCAPLUS' ENTERED AT 15:02:53 ON 27 DEC 2005
L24            9 S L22


=> d que l24
L19              STR
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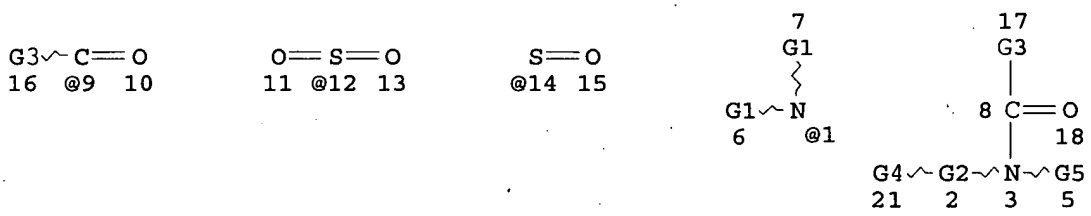


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G1 NH
19 @20

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VAR G2=12/14
VAR G3=H/AK
VAR G4=NH2/20/1
VAR G5=H/AK/9
NODE ATTRIBUTES:
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CONNECT IS E4 RC AT 12
CONNECT IS E3 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE
L22 14 SEA FILE=REGISTRY SSS FUL L19
L24 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L22

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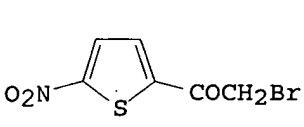
FILE 'HCAPLUS' ENTERED AT 15:05:29 ON 27 DEC 2005

=> d l24 1-24 ibib abs hitstr hitind

L24 ANSWER 1 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1978:406267 HCAPLUS
DOCUMENT NUMBER: 89:6267
TITLE: Derivatives of dithiooxamide
AUTHOR(S): Arya, V. P.
CORPORATE SOURCE: Res. Cent., Ciba-Geigy, Bombay, India
SOURCE: Indian Journal of Pharmacy (1978), 40(1), 5-7
CODEN: IJPAAO; ISSN: 0019-5472
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 89:6267
GI



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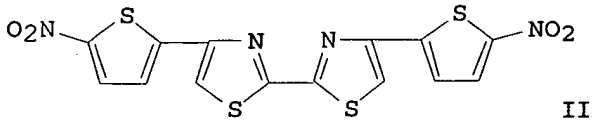
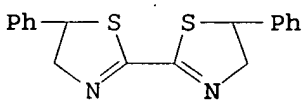


III



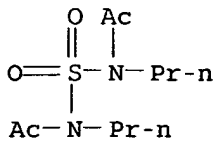
IV

AB RNHCSCSNHR [I, R = 4-FC6H4CH2CH2, 4-ClC6H4CH2CH2, PhCH(OH)CH2, 1-ethyl-3-piperidylamino, Ph2CH] were prepared in 40-90% yields by treatment of I (R = H) with RNH2. Treatment of II with I (R = H) gave 50% III. Cyclohydration of I [R = PhCH(OH)CH2] gave 40% IV. None of the compds. exhibited outstanding pharmacol. activity to warrant further study.

IT **756-41-2**
(reaction of, with dithiooxamide)

RN 756-41-2 HCAPLUS

CN Acetamide, N,N'-sulfonylbis[N-propyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



CC 28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 25, 27
IT 91-00-9 **756-41-2** 1583-88-6 6789-94-2 7568-93-6
10531-45-0
(reaction of, with dithiooxamide)

L24 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1973:551614 HCAPLUS
DOCUMENT NUMBER: 79:151614
TITLE: Crosslinking of hydrophilic colloids
INVENTOR(S): Kyburz, Rolf
PATENT ASSIGNEE(S): Ciba-Geigy A.-G.
SOURCE: Ger. Offen., 44 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

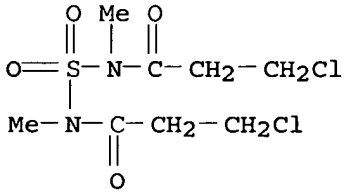
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2309098	A1	19730913	DE 1973-2309098	1973 0223
CH 563598	A	19750630	CH 1972-2722	1972 0225
FR 2173009	A1	19731005	FR 1973-4535	1973 0208
CA 1008848	A1	19770419	CA 1973-163607	1973 0213
US 4001201	A	19770104	US 1973-333247	1973 0216
US 333247	A1	19760316		
GB 1416462	A	19751203	GB 1973-8287	1973 0220
GB 1416463	A	19751203	GB 1974-52240	1973 0220
BE 795839	A1	19730823	BE 1973-127993	1973 0223
IT 977477	A	19740910	IT 1973-48413	1973 0223
JP 48095450	A2	19731207	JP 1973-21797	1973 0224

JP 57024535 B4 19820525
PRIORITY APPLN. INFO.: CH 1972-2722 A 1972 0225

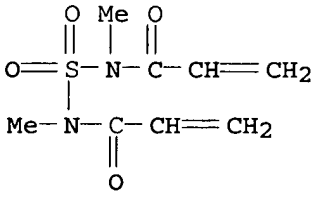
AB Organic crosslinking agents containing sulfonyl linkages are used as hardeners in photog. gelatin emulsions. Thus, 0.1 mole $H_2NSO_2NH_2$, 1.1 mole 3-chloropropionyl chloride, and 0.3 ml $SbCl_5$ are reacted at 70-80°, and the $(ClCH_2CO_2NH)_2SO_2$ (I) produced is collected. To 6 ml 6% aqueous gelatin are added 1 ml 1% aqueous dye solution, 5 ml H_2O, and 1 ml 0.0025M I. This solution is coated on a cellulose triacetate support, and the swelling of the coating under various temperature and humidity conditions measured. Improved resistance to swelling is observed compared to a I-free solution

IT **50695-61-9 50695-73-3**
(photographic hardening agent)

RN 50695-61-9 HCAPLUS
CN Propanamide, N,N'-sulfonylbis[3-chloro-N-methyl- (9CI) (CA INDEX NAME)



RN 50695-73-3 HCAPLUS
CN 2-Propenamide, N,N'-sulfonylbis[N-methyl- (9CI) (CA INDEX NAME)



IC C07C; C08H; G03C
CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic Processes)
IT 50695-60-8 **50695-61-9** 50695-62-0 50695-63-1
50695-64-2 50695-65-3 50695-66-4 50695-67-5 50695-70-0
50695-71-1 50695-72-2 **50695-73-3** 50695-74-4
50695-75-5 50695-76-6
(photographic hardening agent)

L24 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1971:450715 HCAPLUS
DOCUMENT NUMBER: 75:50715
TITLE: Cleanser with bleaching and disinfectant activity
INVENTOR(S): Disch, Karlheinz; Krings, Peter; Kuehling, Dieter; Bellinger, Horst
PATENT ASSIGNEE(S): Henkel und Cie. G.m.b.H.

SOURCE: Ger. Offen., 26 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

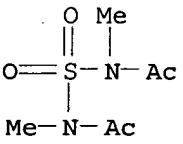
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1953920	A	19710506	DE 1969-1953920	19691027

PRIORITY APPLN. INFO.: DE 1969-1953920 A 19691027

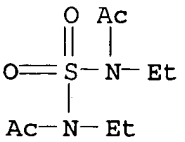
AB The cleanser contains 60-95% abrasive, such as ground quartz, marble, fluorspar, kaolin, felspar, or pumice, 5-40% of a mixture of 5-100% activator of general structure R3CON(R1)SO2N(R2)COR4 (I) and per compound such that the molar ratio of acyl groups in activator to H2O2 in per compound is 0.1-10, and 0-5% organic complexants, inorg. builders, surfactants, enzymes, corrosion inhibitors, dyes, or perfumes. In structure I, R1 and R2 are C1-4 alkyl, or optionally halogen substituted aryl, and R3 and R4 are C1-5 alkyl; preferred compds. are N,N'-dimethyl-N,N'-diacetylsulfamide, N,N'-diethyl-N,N'-dipropionylsulfamide, or N,N'-diethyl-N,N'-diacetylsulfamide. Per compds. are borate, carbonate, pyrophosphate or silicate compds., or urea or melamine perhydrates. A typical cleanser contains ground marble 88.5, N,N'-diethyl-N,N'-diacetylsulfamide 3, C10-15-alkylbenzenesulfonate 2.5%, and 2% each of sulfated coconut alc., borax, and NaBO2.H2O2.3H2O.

IT **29824-65-5 29824-67-7 29914-32-7**
(activators, for detergent compns. containing borates)

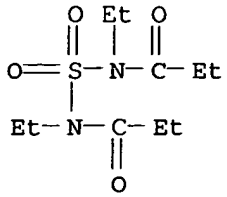
RN 29824-65-5 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-methyl- (8CI) (CA INDEX NAME)



RN 29824-67-7 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-ethyl- (8CI) (CA INDEX NAME)



RN 29914-32-7 HCAPLUS
CN Propionamide, N,N'-sulfonylbis[N-ethyl- (8CI) (CA INDEX NAME)



IC C09G
CC 46 (Surface Active Agents and Detergents)
IT **29824-65-5 29824-67-7 29914-32-7**
29971-81-1
(activators, for detergent compns. containing borates)

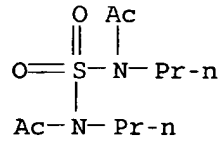
L24 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1970:446965 HCAPLUS
DOCUMENT NUMBER: 73:46965
TITLE: Oxidation, bleaching, and washing products
INVENTOR(S): Kuehling, Dieter
PATENT ASSIGNEE(S): Henkel und Cie. G.m.b.H.
SOURCE: Ger. Offen., 53 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1801713	A	19700611	DE 1968-1801713	1968 1008

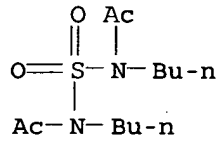
PRIORITY APPLN. INFO.: DE 1968-1801713 A 1968 1008

AB N,N -Diacyl N,N'-dialkyl (or aryl) sulfamides, [R'CON(R)]2-SO2, are activators for inorg. O-releasing peroxygen compds. at low temps. From 0.5 to 1 mole activator is used per g-atom active O or 50-200 mg/l. active O. The preparation of, e.g., N,N'-dimethyl-N,N'-diacetylsulfamide is described: A solution of 4.83 moles MeNH2 and 4 moles C5H5N in 1 l. petroleum ether was slowly added at -30° to a solution of 2 moles SO2Cl2 in petroleum ether, agitated 1 hr at -30° and 12 hr at room temperature, the solvent removed by distillation and 200 ml dilute HCl added to the residue. The acidic reaction solution is extracted with ether, the raw diamide is recrystd. from CHCl3 after evaporation of ether (yield 81.6 g, 41% yield), m. 78-80°. This diamide (0.65 mole) is slowly added with agitation at 50° to 2 moles Ac2O and 2 ml concentrated H2SO4, a clear solution is formed at 50° after 4 hr., then diluted with 150 ml. H2O and extracted with CCl4, dried over Na2SO4, and CCl4 removed under vacuum. The solid residue is recrystd. from ether to yield 94.3 g (71% yield) N,N'-dimethyl-N,N'-diacetylsulfamide, m. 54-6°.
IT **756-41-2 756-42-3 29824-65-5**
29824-67-7 29824-68-8
(activators, for perborate bleaching agents)

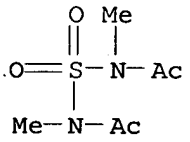
RN 756-41-2 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-propyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



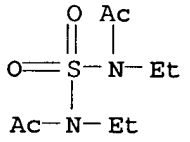
RN 756-42-3 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-butyl- (7CI, 8CI) (CA INDEX NAME)



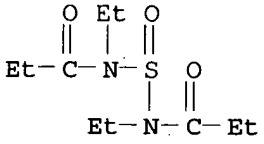
RN 29824-65-5 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-methyl- (8CI) (CA INDEX NAME)



RN 29824-67-7 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-ethyl- (8CI) (CA INDEX NAME)



RN 29824-68-8 HCAPLUS
CN Propionamide, N,N'-sulfinylbis[N-ethyl- (8CI) (CA INDEX NAME)



IC C07C; C01B; C11D
CC 46 (Surface Active Agents and Detergents)
IT **756-41-2 756-42-3** 6104-21-8 22504-72-9
29824-65-5 29824-67-7 29824-68-8

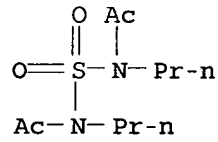
29824-70-2 29971-81-1
(activators, for perborate bleaching agents)

L24 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1969:408056 HCAPLUS
DOCUMENT NUMBER: 71:8056
TITLE: Synthesis with N,N'-disubstituted sulfuric acid diamides. IX. Geometry of the sulfonyl group in substituted sulfuric acid diamides
AUTHOR(S): Sowada, Rudolf
CORPORATE SOURCE: Tech. Hochsch. Chem. "Carl Schorlemmer", Merseburg, Fed. Rep. Ger.
SOURCE: Journal fuer Praktische Chemie (Leipzig) (1969), 311(2), 228-30
CODEN: JPCEAO; ISSN: 0021-8383
DOCUMENT TYPE: Journal
LANGUAGE: German

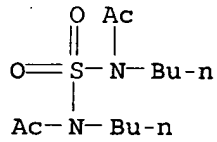
AB The ir spectra of (RR1N)2SO2 (where R = Pr, iso-Pr, Bu, iso-Bu, sec-Bu, tert-Bu, or cyclohexyl; and R1 = H, Me, Et, or Ac) are reported. The following mol. data were calculated for SO2 by the method of R. J. Gillespie and E. A. Robinson (1963): γso 1228-48 cm.-1, bond length 1.44-1.435 A., bond angle 116-17°, force constant 9.5-9.8 dynes/cm., and bond number 1.75.

IT **756-41-2 756-42-3 758-73-6**
(mol. structure of, ir spectrum in relation to)

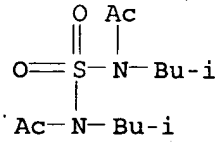
RN 756-41-2 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-propyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 756-42-3 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-butyl- (7CI, 8CI) (CA INDEX NAME)

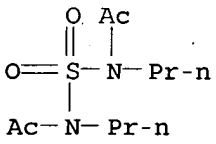


RN 758-73-6 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-isobutyl- (7CI, 8CI) (CA INDEX NAME)

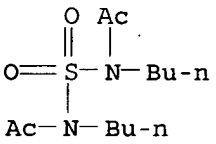


CC 73 (Spectra and Other Optical Properties)
IT **756-41-2 756-42-3** 757-98-2 **758-73-6**
763-11-1 6104-07-0 13952-67-5 14041-87-3 23414-85-9
23414-86-0 23414-87-1 23414-88-2 23415-21-6 23415-26-1
(mol. structure of, ir spectrum in relation to)

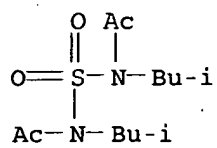
L24 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1969:407963 HCAPLUS
DOCUMENT NUMBER: 71:7963
TITLE: Syntheses with N,N'-disubstituted sulfuric acid diamides. X. Bond and group refractivity of substituted sulfuric acid diamides
AUTHOR(S): Sowada, Rudolf
CORPORATE SOURCE: Tech. Hochsch. Chem., Merseburg, Fed. Rep. Ger.
SOURCE: Journal fuer Praktische Chemie (Leipzig) (1969), 311(2), 350-2
CODEN: JPCEAO; ISSN: 0021-8383
DOCUMENT TYPE: Journal
LANGUAGE: German
AB The molar refractions for (RR1N)2SO2 and RHNSO2OR1 (where R = Pr, iso-Pr, Bu, iso-Bu, or cyclohexyl; and R1 = Cl, Me, Et, Ac, or Pr) are molar consts. formed additively from the atomic refractions of the covalently bonded atoms.
IT **756-41-2 756-42-3 758-73-6**
(optical refraction by bonds in)
RN 756-41-2 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-propyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 756-42-3 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-butyl- (7CI, 8CI) (CA INDEX NAME)



RN 758-73-6 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-isobutyl- (7CI, 8CI) (CA INDEX NAME)



CC 73 (Spectra and Other Optical Properties)
IT **756-41-2 756-42-3 758-73-6** 3488-25-3
3488-26-4 3488-41-3 3488-42-4 3488-43-5 23414-81-5
23414-82-6 23414-83-7 23414-84-8 23414-85-9 23414-86-0
23414-87-1 23414-88-2 23523-53-7
(optical refraction by bonds in)

L24 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1967:2365 HCAPLUS
DOCUMENT NUMBER: 66:2365
TITLE: N'-Trimethylacetyl-N-phenylalkylsulfamides and phenylcyclopropylsulfamides
PATENT ASSIGNEE(S): Smith Kline and French Laboratories
SOURCE: Brit., 7 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1034490		19660629	GB	
DE 1239700			DE	
US 3267139		19660000	US	
PRIORITY APPLN. INFO.:			US	1963 0924

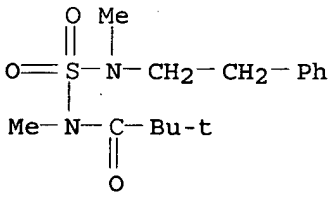
GI For diagram(s), see printed CA Issue.
AB The title compds. (I and II, resp.) have central nervous system activity and anticonvulsant activity. They produce Parkinson-like symptoms in exptl. animals and are useful for evaluating new drugs for anti-Parkinson activity where A is an alkylene of 2 or 3 C atoms and R is H, Cl, or CF3. In an example of I, a mixture of 24.2 g. phenethylamine, 21.1 g. sulfamide and 300 ml. H2O is heated for 4 hrs. at 90-5° (steam bath), Et2O-extracted and the extract washed with dilute HCl, then extracted with 5% NaOH. Addition of dilute HCl and recrystn. (Et2O-hexane) gives phenethylsulfamide (III). A solution of 55.0 g. III and 16.5 g. CMe3COCl in 500 ml. C6H6 is refluxed 18 hrs., then concentrated and cooled to give N'-trimethylacetyl-N-phenethylsulfamide, m. 157-8° (CHCl3). Similarly prepared were the following N'-trimethylacetyl-N-(R'-substituted)-sulfamides (R'- and m.p. given):- 3-phenylpropyl, 148-9° (CHCl3); 2-phenylpropyl, 136-7° (CHCl3); 2-phenylisopropyl, 184-5° (CHCl3); 1-phenylethyl, 179-80° (CHCl3); p-chlorophenethyl, 147-8° (CHCl3); m-chlorophenethyl, 150-1° (CHCl3); o-chlorophenethyl, 180-1° (CHCl3); p-bromophenethyl, -; p-fluorophenethyl, -; 3-methylphenethyl, -; 4-(trifluoromethyl)phenethyl, -; methyl-N-phenethyl, -; N'-dimethyl-N-phenethyl, -;

2,4-dichlorophenethyl, -; 3,4-dichlorophenethyl, -; 2,4-dimethylphenethyl, -; 3,4-dimethoxyphenethyl, -; 3,4-methylenedioxyphenethyl, -; p-hydroxyphenethyl, -; p-nitrophenethyl, -; p-aminophenethyl, -. As an example of II, 20 g. trans-2-phenylcyclopropylamine is refluxed 10 hrs. in HCO2Et. Evaporation and recrystn. from Et2O gives trans-N-formyl-2-phenylcyclopropylamine (IV). A mixture of 8.0 g. IV and 1.2 g. NaH in 100 ml. C6H6 is refluxed 1 hr., then a solution of 6.7 g. SO2Cl2 in 20 ml. C6H6 is added, with stirring, at 0-5°. The mixture is treated with an excess of gaseous NH3, allowed to stand overnight, and filtered and the filtrate washed (H2O) and evaporated to dryness in vacuo to yield trans-N-formyl-2-phenylcyclopropylsulfamide (V). V is heated 1 hr. with 3% aqueous HCl and extracted with C6H6 and the extract washed (H2O) and concentrated The residue is recrystd. (C6H6) to give trans-2-phenylcyclopropylsulfamide, m. 109-10°. Also prepared were: trans-2-(4-chlorophenyl)cyclopropylsulfamide; trans-N'-trimethylacetyl-N-[2-(4-chlorophenyl)cyclopropyl]sulfamide; cis-2-(4-chlorophenyl)cyclopropylsulfamide; cis-N'-trimethylacetyl-N-[2-(4-chlorophenyl)cyclopropyl]sulfamide; N-methyl-N-(2-phenylcyclopropyl)sulfamide; N'-trimethylacetyl-N-methyl-N-(2-phenylcyclopropyl)sulfamide; N'-trimethylacetyl-N-butyl-N-(2-phenylcyclopropyl)sulfamide.

IT **13333-10-3P**
(preparation of)

RN 13333-10-3 HCAPLUS

CN Propionamide, N,2,2-trimethyl-N-(methylphenethylsulfamoyl)- (8CI) (CA INDEX NAME)



IC C07C

CC 25 (Noncondensed Aromatic Compounds)

IT 13333-09-0P **13333-10-3P** 13333-11-4P 13333-12-5P
13333-27-2P 13333-28-3P 13333-29-4P 13333-30-7P
13333-31-8P 13333-32-9P 13333-33-0P 13333-34-1P
13333-35-2P 13333-36-3P 13560-34-4P, Sulfamide, N-methyl-N-(2-phenylcyclopropyl)- 13560-34-4P
(preparation of)

L24 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1965:15047 HCAPLUS

DOCUMENT NUMBER: 62:15047

ORIGINAL REFERENCE NO.: 62:2705c-e

TITLE: Syntheses with N,N'-disubstituted sulfuric acid diamides. IV. Acetylation of 1,3-disubstituted sulfuric acid diamides

AUTHOR(S): Sowada, Rudolf

CORPORATE SOURCE: Tech. Hochschule, Leuna, Merseburg, Germany

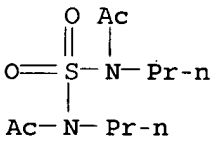
SOURCE: Journal fuer Praktische Chemie (Leipzig) (1964), 26(3-4), 184-94
CODEN: JPCEAO; ISSN: 0021-8383

DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 62:15047

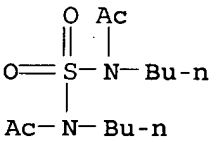
AB cf. CA 61, 11884a. 1,3-Disubstituted SO2(NH2)2 can be acetylated in 75-86% yield on the N atoms by means of Ac2O in the presence of catalytic amts. of concentrated H2SO4 at 50°. The resulting di-Ac derivs. are very sensitive to bases and are readily deacetylated to the starting material; they dissolve in concentrated H2SO4 with the cleavage of the Ac group. The preparation of the corresponding 1,3-di-Bz derivs. failed because the N-S bond of the amides is considerably weakened by the acyl groups. SO2(NHPr)2 (18.0 g.) added at 50° with stirring to 30 cc. Ac2O and 1 cc. concentrated H2SO4, kept 1 hr. at 50°, and poured into 100-50 cc. H2O gave 22.8 g. SO2(NAcPr)2, b1.6 133°, n20D 1.4701, d20 1.160. SO2(NHBu)2 (I) (20.8 g.) gave similarly 24.0 g. SO2(NAcBu)2 (II), b2.4 153°, n20D 1.4678, d20 1.111. SO2(NHCH2CHMe2)2 (III) (20.8 g.) gave 22.0 g. SO2(NAcCH2CHMe2)2 (IV), b1.7 142°, n20D 1.4693, d20 1.117. II (2.92 g.) and 30 cc. 10% aqueous NaOH refluxed 10 min. and stirred into 80 cc. cold H2O gave 1.55 g. I, leaflets, m. 126-7°. IV (2.92 g.) gave similarly 1.3 g. III, leaflets, m. 104-5°. II (2.92 g.) treated 10 min. at room temperature with 25 cc. concentrated H2SO4 and stirred into 100 cc. H2O gave 1.4 g. I. IV (2.92 g.) gave similarly 1.2 g. III, m. 103.5-4.5°.

IT **756-41-2**, Acetamide, N,N'-sulfonylbis[N-propyl-
756-42-3, Acetamide, N,N'-sulfonylbis[N-butyl-
758-73-6, Acetamide, N,N'-sulfonylbis[N-isobutyl-
(preparation of)

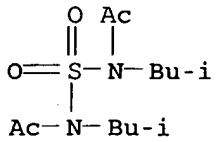
RN 756-41-2 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-propyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 756-42-3 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-butyl- (7CI, 8CI) (CA INDEX NAME)



RN 758-73-6 HCAPLUS
CN Acetamide, N,N'-sulfonylbis[N-isobutyl- (7CI, 8CI) (CA INDEX NAME)



CC 33 (Aliphatic Compounds)
IT **756-41-2**, Acetamide, N,N'-sulfonylbis[N-propyl-
756-42-3, Acetamide, N,N'-sulfonylbis[N-butyl- 757-98-2,
Sulfamide, N,N'-diisobutyl- **758-73-6**, Acetamide,
N,N'-sulfonylbis[N-isobutyl- 763-11-1, Sulfamide, N,N'-dibutyl-
(preparation of)

L24 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1964:23426 HCAPLUS
DOCUMENT NUMBER: 60:23426
ORIGINAL REFERENCE NO.: 60:4154h,4155a-d
TITLE: Dialkyl (2,2-dichloro-1-aminovinyl) phosphates
INVENTOR(S): Schuler, Max; Helfenberger, Hans; Lutz, Karl
PATENT ASSIGNEE(S): Sandoz Ltd.
SOURCE: 24 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1339156		19631004	FR	
DE 1227449			DE	
GB 969829			GB	
US 3183258		1965	US	
US 3183288		1965	US	
PRIORITY APPLN. INFO.:			CH	1961 1110

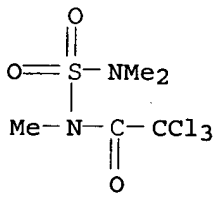
AB RR'NCOCCl3 (I) and trialkyl phosphites give (RO)2P(O)OC(NR'R''):CCl2 (II), which can be used as parasiticides. Thus, a solution of 24 g. HCONHMe in 20 mL. Cl2C:CHCl is added in .apprx.1 h. to a refluxing solution of 61 g. Cl3CCOCl in 300 mL. Cl2C:CHCl, and the mixture refluxed 3 h. and distilled to give .apprx.90% N-trichloroacetyl-N-methylacetamide, b0.0653-7°, n20D 1.5040. Similarly prepared are the following I (R, R', and phys. consts. given): Me, SO2NMe2, m. 106° (alc.); Me, CHO, b0.1 50-2°; Et, CHO, b0.06 48-50°; Et, Ac, b0.3 62°; Me, CO2Me, b0.1 67°; Me, CO2Et, b12 114°; Et, CO2Me, b0.1 70-1°; Et, CO2Et, b0.03 74-5°; Me, EtCO, n20D 1.4999; Me, CONHMe, b0.15 86°, m. 34-8°; Me, CONMe2, b0.04 93°; Me, CONEt2, -; Et, SO2NMe2, m. 69-71°; Me, SO2NEt2, -, Et, SO2NEt2, b0.2 117-20°; (NRR' =) 2-oxopyrrolidinyl, b0.1 106°; (NRR' =) 2-oxazolidinon-3-yl, m. 77°; (NRR' =) 2-imidazolidinon-1-yl, m. 144°; (NRR' =) 2-oxo-5-methylpyrrolidinyl, m. 38°; (NNR' =) 2-oxopiperidino, m. 84°. A mixture of 92.2 g. I (NRR' = 2-oxopyrrolidinyl) and 300 mL. xylene is heated at 80°,

52.1 g. (MeO)3P added in 20 min. (the temperature rises to 90-110°), the mixture agitated 1 h. at 100-10°, and the xylene distilled in vacuo, to give .apprx.90% O,O-di-Me O-[1-(2-oxopyrrolidinyl)-2,2-dichlorovinyl] phosphate. Similarly prepared are the following II (R, R', and R'' given): Me, (NR'R'' =) 2-oxopyrrolidinyl; Me, Me, SO2NEt2; Et, (NR'R'' =) 2-oxazolidinon-3-yl; Me, Me, CHO (b0.1 103-6°); Et, Me, CHO (b0.08 105-8°); Me, Et, CHO (b0.08 112-15°); Et, Et, CHO (n20D 1.4696); Me, Me, Ac; Et, Me, Ac; Me, Et, Ac; Et, Et, Ac; Me, Me, EtCO (n20D 1.4787); Et, Me, EtCO (n20D 1.4686); Me, Me, CO2Me; Et, Me, CO2Me (n20D 1.4712); Me, Me, CO2Et (b0.04 122-6°, n20D 1.4675); Et, Me, CO2Et (b0.02 120-2°, n20D 1.4625); Me, Et, CO2Et (b0.02 123-5°, n20D 1.4698); Et, Et, CO2Et (b0.06 132°, n20D 1.4648); Me, Et, CO2Me (n20D 1.4749); Et, Et, CO2Me (n20D 1.4650); Me, Me, CONHMe; Et, Me, CONHMe; Et, Me, CONMe2; Me, Me, CONEt2; Et, Me, CONEt2; Et, Me, SO2NEt2; Me, Me, SO2NMe2; Et, Me, SO2NMe2; Me, Et, SO2NEt2; Et, Et, SO2NEt2; Me, (NR'R'' =) 2-oxazolidinon-3-yl; Me, (NR'R'' =) 2-oxoimidazolidinon-1-yl; Et, (NR'R'' =) 2-oxoimidazolidinon-1-yl; Me, (NR'R'' =) 2-oxo-5-methyl-pyrrolidinyl; Et, (NR'R'' =) 2-oxo-5-methylpyrrolidinyl; Me, (NR'R'' =) 2-oxopiperidino; Et, (NR'R'' =) 2-oxopiperidino; Me, Et, SO2NMe2; Et, Et, SO2NMe2. Also prepared is EtO(MeO)P(O)OC[N(CONMe2)Me]:CCl2.

IT **89181-42-0**, Acetamide, 2,2,2-trichloro-N-(dimethylsulfamoyl)-N-methyl- **89582-87-6**, Acetamide, 2,2,2-trichloro-N-(dimethylsulfamoyl)-N-ethyl- **89693-59-4**, Acetamide, 2,2,2-trichloro-N-(diethylsulfamoyl)-N-methyl- **92064-01-2**, Acetamide, 2,2,2-trichloro-N-(diethylsulfamoyl)-N-ethyl-
(preparation of)

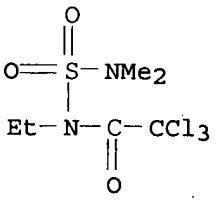
RN 89181-42-0 HCAPLUS

CN Acetamide, 2,2,2-trichloro-N-(dimethylsulfamoyl)-N-methyl- (7CI) (CA INDEX NAME)



RN 89582-87-6 HCAPLUS

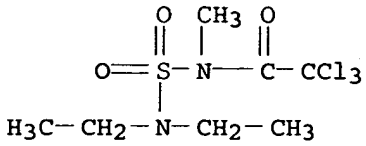
CN Acetamide, 2,2,2-trichloro-N-(dimethylsulfamoyl)-N-ethyl- (7CI) (CA INDEX NAME)



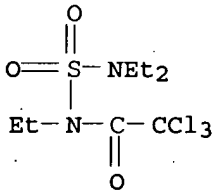
RN 89693-59-4 HCAPLUS

CN Acetamide, 2,2,2-trichloro-N-(diethylsulfamoyl)-N-methyl- (7CI)

(CA INDEX NAME)



RN 92064-01-2 HCAPLUS
CN Acetamide, 2,2,2-trichloro-N-(diethylsulfamoyl)-N-ethyl- (7CI)
(CA INDEX NAME)



IC A01N; C07F
CC 38 (Heterocyclic Compounds (More Than One Hetero Atom))
IT 17676-82-3, Phosphoric acid, dimethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N-methylformamide 17676-83-4, Phosphoric acid, diethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N-methylformamide 17676-84-5, Phosphoric acid, dimethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N-ethylformamide 17676-85-6, Phosphoric acid, diethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N-ethylformamide 17676-86-7, Phosphoric acid, dimethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N-methylacetamide 17676-88-9, Phosphoric acid, dimethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N-ethylacetamide 17676-89-0, Phosphoric acid, dimethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N-methylpropionamide 17676-90-3, Carbamic acid, (2,2-dichloro-1-hydroxyvinyl)methyl-, methyl ester, di-Me phosphate 17676-91-4, Carbamic acid, (2,2-dichloro-1-hydroxyvinyl)methyl-, methyl ester, di-Et phosphate 17676-92-5, Carbamic acid, (2,2-dichloro-1-hydroxyvinyl)methyl-, ethyl ester, di-Me phosphate 17676-93-6, Carbamic acid, (2,2-dichloro-1-hydroxyvinyl)methyl-, ethyl ester, di-Et phosphate 17676-94-7, Carbamic acid, (2,2-dichloro-1-hydroxyvinyl)ethyl-, ethyl ester, di-Me phosphate 17676-95-8, Carbamic acid, (2,2-dichloro-1-hydroxyvinyl)ethyl-, ethyl ester, di-Et phosphate 17676-97-0, Phosphoric acid, diethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-1,3,3-trimethylurea 17676-98-1, Phosphoric acid, dimethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-3,3-diethyl-1-methylurea 17676-99-2, Phosphoric acid, diethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-3,3-diethyl-1-methylurea 17677-00-8, Phosphoric acid, dimethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N,N',N'-trimethylsulfamide 17677-01-9, Phosphoric acid, diethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N,N',N'-trimethylsulfamide 17677-02-0, Phosphoric acid, dimethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N',N'-diethyl-N-methylsulfamide 17677-03-1, Phosphoric acid, diethyl ester, ester with

N-(2,2-dichloro-1-hydroxyvinyl)-N',N'-diethyl-N-methylsulfamide 17677-04-2, Phosphoric acid, dimethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N,N',N'-triethylsulfamide 17677-05-3, Phosphoric acid, diethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N,N',N'-triethylsulfamide 17677-06-4, Phosphoric acid, dimethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-2-pyrrolidinone 17677-08-6, Phosphoric acid, diethyl ester, ester with 3-(2,2-dichloro-1-hydroxyvinyl)-2-oxazolidinone 17677-09-7, Phosphoric acid, dimethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-2-imidazolidinone 17677-11-1, Phosphoric acid, dimethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-2-piperidone 17677-12-2, Phosphoric acid, diethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-2-piperidone 18487-00-8, Phosphoric acid, diethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-2-pyrrolidinone 66878-91-9, Acetamide, 2,2,2-trichloro-N-formyl-N-methyl- 89181-02-2, 2-Oxazolidinone, 3-(trichloroacetyl)- **89181-42-0**, Acetamide, 2,2,2-trichloro-N-(dimethylsulfamoyl)-N-methyl- 89182-41-2, Acetamide, 2,2,2-trichloro-N-ethyl-N-formyl- 89380-37-0, 2-Pyrrolidinone, 1-(trichloroacetyl)- 89463-83-2, Urea, 1,3-dimethyl-1-(trichloroacetyl)- 89581-18-0, Propionamide, N-methyl-N-(trichloroacetyl)- 89581-19-1, Carbamic acid, ethyl(trichloroacetyl)-, methyl ester **89582-87-6**, Acetamide, 2,2,2-trichloro-N-(dimethylsulfamoyl)-N-ethyl- 89641-92-9, Urea, 1,1,3-trimethyl-3-(trichloroacetyl)- 89693-54-9, Phosphoric acid, dimethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-1,3-dimethylurea **89693-59-4**, Acetamide, 2,2,2-trichloro-N-(diethylsulfamoyl)-N-methyl- 89728-71-2, Carbamic acid, ethyl(trichloroacetyl)-, ethyl ester 89792-92-7, 2-Piperidone, 1-(trichloroacetyl)- 89792-93-8, 2-Pyrrolidinone, 5-methyl-1-(trichloroacetyl)- 89850-45-3, Carbamic acid, methyl(trichloroacetyl)-, ethyl ester 90090-22-5, Urea, 1,1-diethyl-3-methyl-3-(trichloroacetyl)- 90797-34-5, Phosphoric acid, dimethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-5-methyl-2-pyrrolidinone 90801-08-4, Diacetamide, 2,2,2-trichloro-N-methyl- 90801-09-5, Carbamic acid, methyl(trichloroacetyl)-, methyl ester 90867-86-0, Phosphoric acid, dimethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N-ethyl-N',N'-dimethylsulfamide 90952-67-3, Carbamic acid, (2,2-dichloro-1-hydroxyvinyl)ethyl-, methyl ester, di-Me phosphate 91251-11-5, Phosphoric acid, diethyl ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-5-methyl-2-pyrrolidinone 91448-16-7, Diacetamide, 2,2,2-triochloro-N-ethyl- 91951-70-1, Carbamic acid, (2,2-dichloro-1-hydroxyvinyl)ethyl-, methyl ester, di-Et phosphate **92064-01-2**, Acetamide, 2,2,2-trichloro-N-(diethylsulfamoyl)-N-ethyl- 92145-44-3, Phosphoric acid, ethyl Me ester, ester with 1-(2,2-dichloro-1-hydroxyvinyl)-1,3,3-trimethylurea 94406-27-6, Phosphoric acid, diethyl ester, ester with N-(2,2-dichloro-1-hydroxyvinyl)-N-methylpropionamide 856648-40-3, Sulfamide, N-(2,2-dichloro-1-hydroxyvinyl)-N',N'-diethyl-N-methyl-, phosphate
(preparation of)